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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/606,387	06/26/2003	Peter Brandt	31020063US-02	6015

7590 04/25/2007  
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EXAMINER
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ZAIDI, SYED

ART UNIT	PAPER NUMBER
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2609

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/25/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

## Office Action Summary

Application No.

10/606,387

Applicant(s)

BRANDT ET AL.

Examiner

Syed Zaidi

Art Unit

2609

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 June 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 06/26/2003.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

## **DETAILED ACTION**

### **Priority**

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### **Information Disclosure Statement**

The information disclosure statement submitted on 06/26/2003 been considered by the Examiner and made of record in the application file.

### ***Preliminary Amendment***

Preliminary Amendment submitted on 06/26/2003 been considered by the Examiner and made of record in the application file.

### **Drawings**

The drawings are objected to because (All modules in all figures are not labeled properly) Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of

the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) The invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 1-3 and 5-7** are rejected under 35 U.S.C.102 (e) as being anticipated by **Choi et al.**, (U.S. Patent Application Publication # 2003/0185193 A1).

Consider claim **1**, **Choi et al.**, clearly show and disclose in a communication device (figure 1) comprising a physical layer (117) and two or more higher layers (RLC 111, RLC 113, RLC 115) said physical layer comprising means to acquire a data modulated waveform signal (Paragraphs 0007 and 0008) comprising at least one data block and an indicator of the format of said data block inherently taught in (paragraphs 0008, 0011, 0013) means to process said block and indicator (Paragraph

0013) in order to be able to map the received block onto a number of transport channels layer in the higher layers (Paragraph 0021), characterized in that said physical layer comprises (Paragraph 0008) a shared memory block (Paragraphs 0009, 0041 and figure 2 (211)) wherein lookup tables (Paragraph 0119) for transport formats (Paragraph 0118), and transport format indicators (Paragraphs 0040, 0041) can be saved, allowing the physical layer (Paragraphs 0008) to identify transport formats for one or more transport channels (Paragraphs 0007, 0021) a connection between the physical layer and the higher layers (Paragraph 0102) which allows said lookup tables to be loaded into said shared memory block (Paragraphs 0009, 0041 and figure 2 (211)) from the higher layers (Paragraph 0002) a finite state machine. **Choi et al.** also show and disclose the RRC layer 111, the RLC layer 113, and the physical layer RLC117. Buffers for storing data, such as a shared memory is a part of finite state machine (Paragraph 0009) capable of acquiring the transport format from the shared memory block (Paragraphs 0009, 0021).

**Consider claim 2**, and as applied to claim above, **Choi et al.**, clearly show and disclose in the device of claim, wherein said higher layers

consist of a data link layer (layer 111, 113) and a network layer (layer 115).

**Consider claim 3**, as applied to claim 1 above, **Choi et al.**, clearly show and disclose in the the device, wherein said physical layer (Layer 117) is implemented in hardware (Paragraphs 0008, 0009).

**Consider claim 5**, **Choi et al.**, clearly show and disclose in the device of Claim 1, realized as or as part of an integrated circuit (inherent) which comprises a communication device comprising a physical layer (Paragraph 0040) and two or more higher layers, said physical layer (Paragraph 0008, figure 1 (117)) comprising means to acquire a data modulated waveform signal, comprising at least one data block and an indicator of the format of said data block means a process said block and indicator in order to be able to map the received block onto a number of transport channels in the higher layers, characterized in that said physical layer comprises: a shared memory block (Paragraphs 0009, 0041 and figure 2 (211)) wherein lookup tables (Paragraph 0012) for transport format indicators can be saved (Paragraph 0113) allowing the physical

layer to identify transport formats for one or more transport channels, a connection between the physical layer and the higher layers which allows said lookup table to be loaded into said shared memory block (Paragraphs 0009) from the higher layers, and a finite state machine, capable of acquiring the transport format (Paragraphs 0018, 0019) from the shared memory block.

**Consider claim 6, Choi et al.,** clearly show and disclose in a method of processing a data modulated waveform signal, comprising the steps of Receiving by a receiving device, a data modulated waveform signal comprising at least one data block and at least one indicator of the format of said data block, said receiving device comprising a physical layer (Paragraphs 0010) and a number of higher layers, transferring said data block over a physical data channel, while transferring said indicator over a physical control channel (Paragraphs 0016, 0017, 0040) decoding and demultiplexing said data block, in order to map said data block onto at least one transport channel (Paragraphs 0074) decoding said indicator of the format of said data block, resulting into one code for the format of said data block, looking up in a first table (Paragraphs 0103, 0104 and figure 5



(table 511)) an indicator to the format for each transport channel which corresponds to the code (Paragraphs 0021, 0039) for the format of said data block (Paragraphs 0120), said first table being present in a shared memory block, which is implemented in said physical layer, looking up in a second table (Paragraph 0106, figure 4 and table(411)) all transport formats (Paragraphs 0011) which correspond to said indicator to the format for each transport channel (Paragraphs 0011), said second table being present in said shared memory block, which is implemented in said physical layer mapping (Paragraphs 0010) said data block onto said at least one transfer channel (Paragraphs 0008, 0010) in the correct transport format (Paragraphs 0006, 0010).

**Consider claim 7**, and as applied to claim 6 above, **Choi et al.**,  
Clearly further show and disclose the CDMA (Paragraph 0006).

### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the

subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 4** is rejected under 35 U.S.C. 103(a) as being unpatentable by **Choi et al.**, (U.S. Patent Application Publication # 2003/0185193 A1) in view of **Alajajian** (U.S. Patent Number # 5,668,880)

**Consider claim 4**, and as applied to claim 3 above, **Choi et al.**, clearly show and disclose wherein said physical layer (Layer 117) comprises an inner modem. However **Choi et al.**, fail to show an inner modem and an outer modem.

In the same field of endeavor, **Alajajian** clearly show and disclose a method for data communication device (Column 3 lines 31-43 and figure # 3 modulator 8,10 and demodulators 9,11) connected with Micro processor (Figure 3, (7) and coupled with (RAM & ROM). **Alajajian** also disclose (MODEM) (Modulator/Demodulator) data frames transmitted at a constant frequency as he teaches and explain in figure 15 (Column 8 lines 21-24).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention was made to incorporate the function of the controlling the phase successively transmitted data taught by **Alajajian**. in the device of **Choi et al.**, for the purpose of data signal processing.

### **Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure Williards et al. (U.S. Patent # 7,072,329 B2) and Lewis et al. (U.S. Patent Application Publication # 2004/0116119 A1)

Any response to this Office Action should be **faxed to** (571) 273-8300  
**or mailed to:**

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P.O. Box 1450  
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**Hand-delivered responses** should be brought to

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Randolph Building  
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Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Syed Zaidi whose telephone

number is (571) 270-1779. The Examiner can normally be reached on Monday-Thursday from 6:30am to 5:00pm.

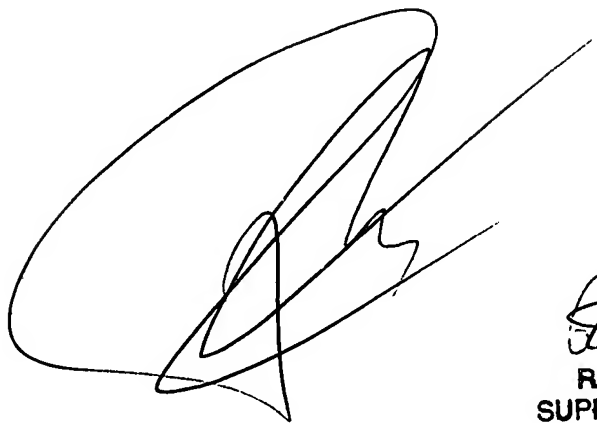

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached on (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 571-272-4100.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

*Syed Zaidi*  
S.Z/s.z

16<sup>th</sup> January 2007

A large, stylized handwritten signature in black ink, consisting of several overlapping loops and a long horizontal stroke extending to the right.A smaller handwritten signature in black ink, appearing to read "Rafael Perez-Gutierrez".

RAFAEL PEREZ-GUTIERREZ  
SUPERVISORY PATENT EXAMINER  
4/23/07